Amendments to the Claims:

This listing of claims will replace all prior versions of claims in the application.

Listing of Claims:

Claim 1. (currently amended) Device comprising an electron donor structure containing at least one type of conjugated polymer, and an electron acceptor structure containing at least one type of a tubular nanostructure ~~having at least one complexed or adsorbed pigment on its surface~~ (1), wherein said tubular nanostructure (1) has a layer of at least one pigment (3) directly adsorbed on its outer periphery (2), and at least one polymer (5) having an anchoring point (4) on said layer of at least one pigment (3).

Claim 2. (previously presented) Device according to claim 1, wherein the tubular nanostructure is selected from the group consisting of straight Single-wall carbon nanotubles, straight double-wall carbon nanotubes, straight multi-wall carbon nanotubes, bent Single-wall carbon nanotubes, bent double-wall carbon nanotubles, bent multi-wall carbon nanotubes (SWNT, DWNT and MWNT), and any mixture thereof.

Claim 3. (previously presented) Device according to claim 1, wherein the pigment complexed on the tubular nanostructure is selected from the group consisting of inorganic pigments treated so as to be compatible with a polymer or an organic solvent, azo pigments, yellow and orange monoazo pigments, diazo pigments, naphthol pigments, Naphthol® AS pigments (naphthol red), azo pigment lakes, benzimidazolone pigments, diazo condensation pigments, complex metal pigments, isoindolinone and isoindoline pigments, polycyclic pigments, phthalocyanine pigments, a sulfonated copper phthalocyanine containing an average of 0.5 to 3 sulfonic acid groups, a chlorinated copper phthalocyanine, an aluminum phthalocyanine, a brominated phthalocyanine, an aluminum phthalocyanine, a metal-free phthalocyanine, quinophthalone pigments, indathrone pigments, yellow diacrylide pigments, diazopyrazolone pigments, azo-metal pigments, triarylcarbonium pigments, rhodamine lake pigments, perylene pigments, quinacridone pigments and diketopyrrolopyrrole pigments, molecules of porphyrin or derivatives thereof, and mixtures of two or more of all these.

Claim 4. (previously presented) Device according claim 1, wherein the typical diameter of the nanostructures is in the range between 0.5 and 200 nanometers.

Claim 5. (cancelled)

Claim 6. (previously presented) Device according to claim 5, wherein the polymer having an anchoring point on said layer of at least one pigment is a hydroxyoctadecanoic acid/ aziridine block copolymer.

Claim 7. (previously presented) Device according to claim 5, wherein the weight ratio nanotubes/pigment/polymer is between 1/1/1 and 1/5/1.

Claim 8. (previously presented) Device according to claim 1, wherein the pigment is phthalocyanine.

Claim 9. (previously presented) Device according to claim 1, wherein the conjugated polymer is selected from the group consisting of polyacetylenes, polyparaphenylenes, polypyrrole sulfides, polyparaphenylene sulfides, polythiophenes, polyphenylene vinylenes, poly-3-methylthiophene, polycarbazole, polyisothianaphthene, poly(1,6-heptadiyne), poly-3-alkylthiophene in which the chosen alkyl is especially C_1-C_5, poly(3,4-ethylenedioxythiophene) or PEDOT, polyquinoline, poly-3-alkylsulfonate in which the chosen alkyl group is especially C_1-C_5, and polyaniline and derivatives thereof, preferably polyphenylene vinylenes and poly(3-octylthiophenes).

Claim 10. (previously presented) Device according to claim 1, wherein the tubular nanostructure functions as an electron acceptor structure mixed with a binding polymer.

Claim 11. (previously presented) Device according to claim 1, wherein the electron acceptor structure and electron donor structure are mutually discernible or form a composite structure.

Claim 12. (previously presented) Device according to claim 1, wherein said device forms a PN heterojunction of a photovoltaic cell.

Claim 13. (currently amended) Process for the manufacture of a device as defined in claim 1 containing at least one type of conjugated polymer, wherein said process comprises a step for forming a structure functioning as an electron acceptor structure which comprises at least one type of tubular nanostructure~~, which in turn comprises at least one complexed or adsorbed pigment on its surface~~ (1), wherein said tubular nanostructure (1) has a layer of at least

one pigment (3) directly adsorbed on its outer periphery (2), and at least one polymer (5) having an anchoring point (4) on said layer of at least one pigment (3).

Claim 14. (previously presented) Manufacturing process according to claim 13, wherein the tubular nanostructures are assembled in the form of a paper or mat of nanotubes by deposition from a suspension containing tubular nanostructures.

Claim 15. (previously presented) Manufacturing process according to claim 13 wherein the tubular nanostructures assembled in the form of a paper undergo a treatment to increase the contact area with the electron donor structure.

Claim 16. (previously presented) Manufacturing process according to claim 13, wherein the electron donor structure is deposited from a solution of conjugated polymer or from molten conjugated polymer by injection or spin coating.

Claim 17. (previously presented) Manufacturing process according to claim 13, wherein the device comprises a composite structure forming the electron acceptor structure and the electron donor structure, said composite structure being produced by mixing, in solution, tubular nanostructures with the conjugated polymer, or by a molten method.

Claim 18. (previously presented) Photovoltaic cell comprising a device as defined in claim 1.

Claim 19. (currently amended) Method of producing electricity from an electromagnetic wave, [[,]] wherein said method comprises:

a) the use of a device as defined in claim 1 for effecting a photovoltaic conversion.

Claim 20. (previously presented) Method of producing electricity from an electromagnetic wave, wherein said method comprises:

a) the bringing of a photovoltaic cell as defined in claim 18 into contact with an electromagnetic wave emitted especially by the sun, and

b) the generation of electricity from said photovoltaic cell.